

BOXEE

Meeting with the Federal Communications Commission

February 1, 2012

Agenda



- Introductions
- Boxee Overview
- Demo
- Boxee's Thoughts on the NPRM
- Discussion

Meet **BOXEE**

- » Founded in **2007**
- » Corporate headquarters in New York
- » ~ **2 million** users worldwide
- » **45** employees and growing
- » Raised **\$28.5 million**:
Pitango, Softbank, General Catalyst, Spark Capital and Union Square Ventures

Meet **BOXEE**

Boxee's mission is to be an alternative to traditional pay TV

Boxee combines programming from broadcast channels (available over the air or on unencrypted basic cable) and over-the-top Internet content, all in a seamlessly integrated, user-friendly interface with innovative social features. Loads of entertainment without paying \$75 per month.

Meet BOXEE

“

“Boxee just reinvented the box. The Boxee Box is no longer just a media streamer, thanks to the just-released Boxee Live TV. The little USB ATSC tuner **integrates OTA HDTV and basic cable seamlessly** into the Boxee Box’s menu system, and I found it’s as wonderful as it sounds. The little box is now the cord cutter’s best friend (if it wasn’t already)... Boxee Live TV is as easy as the rest of the media stream. The Boxee Box was already the **best device to rid oneself from the chains of subscription TV.** Now it’s just that much better.”

Full Circle: Boxee Brings OTA HDTV And Basic Cable To The Boxee Box



DEMO

BOXEE'S THOUGHTS ON THE NPRM

Boxee's Thoughts on the NPRM

Boxee believes that permitting encryption of basic tier cable as proposed in the NPRM will:

» Cause products that consumers rely on to stop working, force millions of users to rent set-top boxes

» Harm start-ups trying to innovate in the space and prevent competitiveness in the market place

Adoption of IP-based standards can achieve the cable companies' goals, while avoiding harms to consumers and innovative businesses

Harms to Boxee and Technology Start-ups

The market for innovative devices combining over-the-top and broadcast content will dwindle.

- » Many parts of the country still have little or no HD antenna reception. We can't count on our users being able to use Boxee Live TV with an OTA signal
- » Currently ~ 40% of our users connect via Clear QAM
- » Lost revenue opportunity in areas with little or no antenna reception, where we projected sales to QAM users
- » Loss of significant capital invested in development
- » Reduced incentive to risk further innovation in a space dominated by MSOs

Harms to Consumers

Who will encryption hurt?

We estimate millions of consumers will see their TVs go dark

Households that can not afford renting multiple boxes

Consumers who rely on QAM in their Bedrooms, Dens, etc. will see their Cable bills increase by \$5-\$15 per month as they will be required to rent additional set-top boxes

Consumers relying on computer tuners

Consumers relying on tuners from Hauppauge, Elgato, HDHomeRun and others to stream TV to computers and tablets

Low Income and Cost Cutting Households

Consumers who chose to lower their Cable bills by subscribing to basic tier and plugging the Cable directly to the TV tuner

Harms to Consumers

Who will encryption hurt?

Eliminate an affordable competitive offering

Boxee Live TV represents a new breed of alternatives to Cable. The combination of broadcast channels with the best of over-the-top services provides a superior user experience for a lower monthly bill.

By eliminating Clear QAM users will have to rely on Antennas that in many cases are not a viable option due to reception issues.

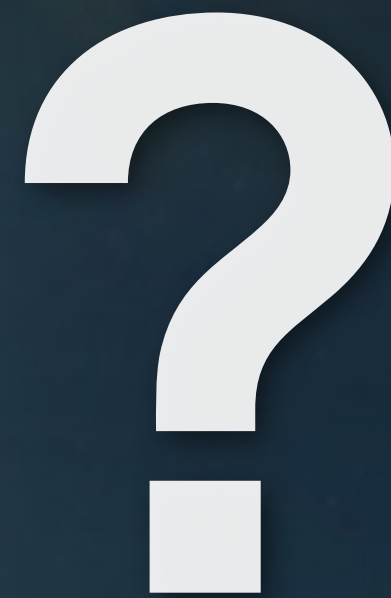
Users looking for an alternative to Cable TV and an option for lowering their monthly bill will be missing on a great competitive alternative.

Harms to Consumers

Every TV will need a STB to receive basic tier cable

- » No longer an option to connect a TV directly to cable without buying or renting any STB device. For consumers not within the scope of interim relief or following the relief period, the cost of renting STBs for every TV will be significant.
- » MVPD-provided STBs don't offer consumer choice and must be rented from providers
- » CableCARD devices sell at higher prices than ATSC/Clear QAM devices, and require rental of CableCARDs
- » Cost and frustration of Clear QAM products suddenly rendered obsolete
- » Increased energy bills from additional STBs in home

Benefits to Consumers



Unless coupled with adoption of standards furthering consumer device compatibility with MVPD content and ensuring access to broadcast channel and public access programming, we don't see any.

CableCARD is not the Answer

CableCARD is expensive

- » Tuner hardware costs are double that of QAM devices and the consumer will need to pay a monthly fee to rent a CableCARD
- » Rather than a one-time \$49 expense, it will be more than \$100 for the device and a monthly fee of ~ \$5 to the cable company
- » Past CableCARD implementations proved the technology is not mature and often resulted in multiple truck rolls and consumer frustration
- » Cable companies acknowledge that they are investing in IP delivery rather than CableCARD technology

CableCARD is not the Answer

CableCARD is an interim solution, burdened by the limitations innate to hardware-based standards and having a limited lifespan as MVPDs move to IP delivery.

Start-ups focus on (and invest their limited capital in) the future of technological innovation, and software-based standards provide the most exciting opportunities for integrating MVPD content and services into the livingroom like never before.

What the Docket Doesn't Say

How many new STBs will be deployed as result of encryption?

» Rough calculations (shown below) based on publicly available figures indicate that Time Warner Cable may rent **any where between 10-21 million additional STBs** as a result of encryption. That's 150% more than the number currently deployed.

» Our calculation is necessarily rough, but if anyone has the market understanding and resources to research this, it's the cable companies - yet they have offered no data to substantiate their assertions that minimal numbers of consumers will be affected.

(12 million TWC customer households according to <http://www.ncta.com/Stats/TopMSOs.aspx> x 2.93 average TVs per US household according to Nielsen) - 14 million TWC STBs in market according to a March 2011 TWC conference call = ~ 21 million TVs in TWC households not currently connected to a STB

What the Docket Doesn't Say

What does that mean for MVPDs?

- » Eliminating a competitive threat from start-ups like Boxee
- » More STBs in market means less risk of declining revenues

“I do think, over time, you'll see a world where increasingly people won't need set-tops. And that has pretty profound implications for our business. . . . And of course, we rent the boxes, so lower revenue to go with it.” Glenn Britt, Chairman and CEO, Time Warner Cable, speaking in June 2011.

- » After the transition period, new STBs will generate rental revenue for MVPDs.
- » Even during the transition period, additional boxes in homes increases market share, provides opportunities for upsells and VOD sales, and creates a transaction cost that acts as a barrier to purchasing independent consumer devices.

What the Docket Doesn't Say

And for Consumers?

- » The number of additional STBs going into market also represents the number of consumer TVs that may now be connected to QAM.
- » A substantial portion of the docket is comments of individual consumers who would be negatively impacted.
- » Other than Boxee's filings, the docket lacks comments about the impact of encryption on new technologies using QAM (as opposed to legacy uses), and the harms to consumers from stifling further development of such products.

How will those additional STBs affect the environment?

- » STBs use large amounts of electricity. Should not assume that the environmental benefits of reduced truck rolls outweigh the environmental harms of these additional STBs.

Responses to the NCTA Letter

Letter from Neal M. Goldberg, Vice President and General Counsel, National Cable & Telecommunications Association, to Marlene H. Dortch, FCC, MB Docket No. 11-169, PP Docket No. 00-67 (Dec. 29, 2011) (the “NCTA Letter”) in response to Letter from Melissa Marks, General Counsel, Boxee, to Marlene H. Dortch, FCC, MB Docket No. 11-169, PP Docket No. 00-67 (Dec. 21, 2011) (the “Boxee Letter”).

“Boxee clearly contemplates that most of its customers will be accessing broadcast channels via an over-the-air antenna and without a cable subscription, which of course means that encryption of the cable basic tier will have no impact on those customers.” (NCTA Letter at 2).

» The Boxee Letter clearly stated that Boxee expected many users to connect via QAM, and as expected, approximately 40% of users have done so. (See Boxee Letter at 1).

“Boxee now seeks a Commission ‘guarantee’ of ‘free access to a device that will decrypt basic tier cable and provide a QAM output.’” (NCTA Letter at 2).

» The Boxee Letter sought no such guarantee, but mentioned the non-existence of such a device to illustrate the deficiencies in the transitional relief offered by the NPRM. (See Boxee Letter at 3). Boxee’s request (stated in the Boxee Letter and again today), is that the Commission not permit basic tier encryption without providing an alternative standard or other means for development of consumer products that are able to access basic tier (broadcast network and public access) content delivered over cable. (See *id.* at 4).

Responses to the NCTA Letter

“[S]ubscribers to premium cable channels” and “consumers who do not subscribe to cable at all” will not be affected by basic tier encryption. (NCTA Letter at 2).

» As described in the Boxee Letter and again today, consumers need not be current subscribers to basic tier cable in order to be hurt by encryption. Anyone who would like the option of using a product like Boxee that seamlessly integrates broadcast channels, OTT content and social features, whether to reduce their cable bill (e.g., in the case of premium subscriber), to take advantage of a service they previously did not know was available or affordable (e.g., a current non-subscriber) or otherwise, and is unable to do so as a result of encryption, will be harmed. (See Boxee Letter at 3).

If Boxee has no interest in spending the money to support CableCARD, it seems improbable that it would have any interest in any proposed successor technology to CableCARD, like AllVid.” (Id. at 3)

» Boxee’s interest in AllVid is not only probable, but fact. Unlike CableCARD’s hardware-related costs and limitations, software standards-based approaches like AllVid hold exciting potential for development of new consumer devices delivering integrated entertainment experiences.

Responses to the NCTA Letter

“Boxee is essentially asking the Commission to deny millions of consumers these benefits [of encryption] on an indefinite basis Boxee’s preferred approach would likely slow cable’s transition to all-digital service and continue to place cable operators at a competitive disadvantage vis-a-vis their competitors. (Id. at 4)

» On the contrary, Boxee would like the Commission to spare consumers the increased costs and decreased consumer choice that would result from eliminating QAM without providing an alternative method for accessing broadcast channel and public access programming. Boxee is supportive of the move to all-digital service and the benefits of reduced truck rolls, when achieved in a way that does not limit device compatibility or consumer choice. When not done in connection with a broader move towards compatibility, such as AllVid would provide, elimination of QAM hurts consumers more than it benefits them.

Boxee is the future . . . and MVPDs know it

“The general concept on the products are as you walk into a home, your device will sync up with your set-top box and you'll be able to access the content. Now we've got a lot of work to do... We think that this is a way to win. We can get a lot more eyeballs on the content.” **Lowell McAdam, Chairman, President and CEO, Verizon, speaking on January 24, 2012.**

“So, we'd have things that we call home gateways... So, that has the benefit not only of feeding IP satellite set-top boxes, but it could also directly feed the IP-enabled devices that we talked about earlier.” **Robert Marcus, President and COO, Time Warner Cable, speaking on November 17, 2011.**

“[M]any of the user interfaces that are out there use the power of the PC, which is a very powerful computing device, obviously. We have been limited by our set-top box technology . . . they're hard to write software to. So one of the things that's going to happen as we embrace IP standards and iPads and smart TVs, is we can start using IP technology which allows you to iterate software very quickly.” **Glenn Britt, Chairman and CEO, Time Warner Cable, speaking in June 2011.**

Eliminating QAM is contrary to the FCC's Goals

“The commission is committed to being a responsive, efficient and effective agency capable of facing the technological and economic opportunities of the new millennium. In its work, the agency seeks to capitalize on its competencies in:

- Promoting competition, innovation, and investment in broadband services and facilities;
- Supporting the nation's economy by ensuring an appropriate competitive framework for the unfolding of the communications revolution;
- Encouraging the highest and best use of spectrum domestically and internationally;
- Revising media regulations so that new technologies flourish alongside diversity and localism;
- Providing leadership in strengthening the defense of the nation's communications infrastructure.”

(www.fcc.gov/what-we-do)

Eliminating QAM is contrary to the FCC's Goals

“Other alternatives are starting to emerge. For example, several innovators are attempting to bring Internet video to the TV. Their **devices often cannot access traditional TV content that consumers value** — content that is not available or difficult to access online. Without the ability to **seamlessly integrate Internet video with traditional TV viewing**, Internet video devices like Apple TV and Roku have struggled to gain a foothold in U.S. homes.” Connecting America: The National Broadband Plan (March 16, 2010) at 19.

Boxee has achieved this goal and offers consumers this ability. Eliminating QAM without moving forward on a new compatibility standard is a giant step backwards, and contrary to the goals of the National Broadband Plan.

The Cable Industry is Playing Dirty

They pressure the media companies not to work with OTT

The licensing agreements they sign are limiting the ability of content companies to distribute their content over the Internet

They make it clear there will be retribution for being more aggressive online

They trick consumers with bundles

Consumers that want only broadband are tricked into triple-plays that will cost the “same” only to see their bills skyrocket after 6 months once the introductory period is over

They spend millions in D.C

Fighting against initiatives such as the Broadband Plan, Net Neutrality and AllVid

Pleading to the FCC with yet another trick to increase their ARPU and limit competition with a proposal that hides behind environmental benefits... the heights of hypocrisy

Summary and Discussion



Encryption of basic tier cable deprives consumers of innovative alternatives to traditional pay TV that rely on QAM compatibility, while increasing STB rental charges, energy costs, and dependency on MVPDs.

The Commission should not permit encryption of basic tier cable without taking concurrent action to increase compatibility of consumer devices with MVPD programming and ensure alternative means of access by non-MVPD devices to broadcast channel and public access programming.